

Having described the invention, I claim the following:

1. An inflator comprising:
  - a housing including at least one exit port;
  - a container in which is stored a fluid under pressure, the container being located in the housing and having opposite first and second ends;
  - a tool located in the housing adjacent the first end of the container for opening the first end of the container; and
  - a pyrotechnic device located adjacent the second end of the container and actuatable for propelling the container through the housing and into contact with the tool so as to cause the tool to open the first end of the container and enable a flow of fluid from the container toward the at least one exit port of the housing.
2. The inflator of claim 1 wherein the flow of fluid from the container acts to propel the container back through the housing in a direction away from the tool, a portion of the housing forming at least part of

a stop mechanism for limiting movement of the container away from the tool.

3. The inflator of claim 2 wherein the portion of the housing that forms at least part of the stop mechanism is a breech block, the breech block engaging the second end of the container to stop movement of the container away from the tool.

4. The inflator of claim 2 wherein the portion of the housing that forms at least part of the stop mechanism includes a surface that partially defines a groove in an inner surface of the housing, a locking member that is attached to the container engaging the surface to stop movement of the container away from the tool.

5. The inflator of claim 1 further including a member for resisting movement of the container toward tool.

6. The inflator of claim 5 wherein the member is a spring that biases the container away from the tool.

7. The inflator of claim 5 wherein the member is a flexible locking member that is attached to the container, the flexible locking member engaging a surface that partially defines a groove in the housing.

8. The inflator of claim 1 wherein the housing is formed from plastic.

9. The inflator of claim 1 wherein the fluid is a combustible gas mixture, the housing including structure for directing hot gas resulting in actuation of the pyrotechnic device into the flow of the combustible gas mixture from the container so as to ignite the combustible gas mixture.

10. The inflator of claim 1 further including a shield that is located in the housing, the shield preventing debris from entering a portion of the housing, the shield being ruptured during movement of the container relative to the housing.

11. An inflator comprising:  
a housing including at least one exit port;

a container in which is stored a fluid under pressure, the container being located in the housing and having opposite first and second ends;

a tool located in the housing adjacent the first end of the container for opening the first end of the container; and

a device that is actuatable for propelling the container through the housing and into contact with the tool so as to cause the tool to open the first end of the container and enable a flow of fluid from the container toward the at least one exit port of the housing;

a portion of the housing forming at least part of a stop mechanism for limiting movement of the container away from the tool in response to the flow of fluid from the container acting to propel the container away from the tool.

12. The inflator of claim 11 wherein the device is a pyrotechnic initiator that is located adjacent the second end of the container.

13. The inflator of claim 12 wherein the fluid is a combustible gas mixture, the housing including

structure for directing hot gas resulting in actuation of the pyrotechnic initiator into the flow of the combustible gas mixture from the container so as to ignite the combustible gas mixture.

14. The inflator of claim 11 wherein the portion of the housing that forms at least part of the stop mechanism is a breech block, the breech block engaging the second end of the container to stop movement of the container away from the tool.

15. The inflator of claim 11 wherein the portion of the housing that forms at least part of the stop mechanism includes a surface that partially defines a groove in an inner surface of the housing, a locking member that is attached to the container engaging the surface to stop movement of the container away from the tool.

16. The inflator of claim 11 further including a member for resisting movement of the container toward tool.

17. The inflator of claim 16 wherein the member is a spring that biases the container away from the tool.

18. The inflator of claim 16 wherein the member is a flexible locking member that is attached to the container, the flexible locking member engaging a surface that partially defines a groove in the housing.

19. The inflator of claim 11 wherein the housing is formed from plastic.

20. The inflator of claim 11 further including a shield that is located in the housing, the shield preventing debris from entering a portion of the housing, the shield being ruptured during movement of the container relative to the housing.

21. An inflator comprising:  
a plastic housing, at least one exit port extending through the plastic housing,  
a container in which is stored a fluid under pressure, the container being located in the plastic housing;

structure associated with the plastic housing and actuatable for propelling the container relative to the plastic housing and into contact with a tool for opening the container to enable a flow of fluid from the container toward the at least one exit port of the plastic housing.

22. The inflator of claim 21 wherein the flow of fluid from the container acts to propel the container back through the plastic housing in a direction away from the tool, a portion of the plastic housing forming at least part of a stop mechanism for limiting movement of the container away from the tool.

23. The inflator of claim 22 wherein the portion of the housing that forms at least part of the stop mechanism is a breech block, the breech block engaging the container to stop movement of the container away from the tool.

24. The inflator of claim 21 further including a member for resisting movement of the container toward tool.